



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,152	02/18/2004	Marcus Bitter	09147-US	5027
30689	7590	02/14/2006	EXAMINER	
DEERE & COMPANY ONE JOHN DEERE PLACE MOLINE, IL 61265			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,152

Applicant(s)

BITTER ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's arguments filed December 12, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 1-4, 6-8 and 13 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by the limitations of claim 1 that combined claims 10 and 11.

Applicant argues that claims 4 and 7 have been amended to claim the adjusting means includes the flow control valve (claim 4) and the pipe break safety valve (claim 7). This doesn't fix the 112 problem. The problem is that it is unclear how claims 4 and 7 are supposed to further limit claims 3 and 6, respectively.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1-4, 6-8 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 22-23 "a load holding valve arrangement is coupled in at least one of said first and second supply lines" is wrong, since the disclosure only discloses the load holding valve in the first line (22). Suggest that "at least" in lines 23 and 24 be deleted.

In claim 4 line 1-4 "said valve arrangement includes a flow control valve...being operative for changing the flow rate as a function of the flow and limits it to a predetermined optimum value" is confusing, in combination with claims 2 and 3 from which it depends; since it is unclear whether the changing of the flow rate as a **function of the flow** is the same as or different from the **control by pressure signals** from the first chamber and reservoir (claim 2). If different, It appears to be claiming limitations from different species, since the limitations of claim 2 is specific to species of figure 2 and this limitation is not. If the same, it appears to not further limit claim 3.

Claim 7 is confusing, since the functions of the pipe break safety valve has been claimed in claims (e.g. claim 2 and 6) claim 7 is dependent from.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 103

Claims 1, 2 and 13 are rejected under 35 U.S.C. § 103 as being unpatentable over Scheidt in view of Theobald and Dueckinghaus et al. Scheidt discloses a hydraulic control circuit comprising a control valve (14) selectively connecting a pump (13) or reservoir (12) to either a first or a second chamber of a cylinder (10); wherein a first line includes an on-off valve (25) and a valve arrangement (26) between the first chamber and the reservoir; wherein the valve arrangement is a pressure relief valve in parallel with a check valve (21), wherein the pressure relief valve is spring biased to a closed position and the through-flow opening is changed by pressure from the first chamber; but does not show that the through-flow opening of the pressure relief valve is changed in response to a pressure signal from the reservoir. Pressure relief valves connected to a reservoir are well known to have a pressure surface acted on by fluid pressure from the reservoir to close the pressure relief valve. Therefore, the pressure relief valve of Scheidt inherently has a pressure surface acted on by fluid pressure from the reservoir to close the pressure relief valve, or it would have been obvious at the time the invention was made to one having ordinary skill in the art to include a pressure surface acted on by fluid pressure from the reservoir to close the pressure relief valve of Scheidt, as a matter of engineering expediency. Scheidt does not disclose that there is a second on-off valve is in the second line, wherein the first and second on-off valves are electromagnetic seat valves; or a load holding valve having a spring biasing a stop valve to a closed position preventing flow to the control valve, with a pilot pressure line coupled between at least one of the first and second chambers and the stop valve, opposite the spring, such that the stop valve opens in response to pressure in the pilot line, with a check valve in parallel to the stop valve, opening toward the cylinder.

Theobald teaches, for a hydraulic control circuit comprising a control valve (18) selectively connecting a pump (13) or reservoir (14) to either a first or a second chamber of a cylinder (12); wherein first and second lines (28, 29, respectively) selectively connect the first and second chambers, respectively, with the reservoir; that the first and second lines include first and second on-off valves (31, 32), respectively.

Dueckinghaus et al teaches, for a hydraulic control circuit comprising a control valve (11) selectively connecting a pump (18) or reservoir (17) to either a first (14) or a second chamber; wherein a first line includes an on-off valve (21) and a valve arrangement (20) between the first chamber and the reservoir; that the on-off valve can be an electromagnetic seat valve.

Since the on-off valves of Scheidt, Theobald and Dueckinghaus et al are functionally equivalent in the hydraulic circuit art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the first on-off valve of Scheidt two on-off valves, each being in a respective one of the two lines, as taught by Theobald, as a matter of engineering expediency; wherein each of the on-off valves are electromagnetic seat valves, as taught by Dueckinghaus et al, as a matter of engineering expediency.

Dueckinghaus et al teaches, for a hydraulic control circuit comprising a control valve (11) selectively connecting a pump (18) or reservoir (17) to either a first (14) or a second chamber; wherein a first line includes an on-off valve (21) and a valve arrangement (20) between the first chamber and the reservoir; that a load-holding valve (13) is in a first supply line (12) between the control valve and the first chamber; wherein the load-holding valve includes a check valve in parallel with a stop valve; and wherein the stop valve includes pilot lines connected to the first and second chambers, to open the stop valve. Dueckinghaus et al does not show a spring biasing the valve closed. The purpose of the stop valves are well known to prevent movement of the cylinder when the valves are not activated. These stop valves are well known as having a spring biasing the valve closed. Therefore, the stop valve of Dueckinghaus et al inherently has a spring biasing it closed, or it would have been obvious at the time the invention was

made to one having ordinary skill in the art to include a spring biasing the stop valve of Dueckinghaus et al closed, as a matter of engineering expediency.

Since Scheidt and Dueckinghaus et al are both from the same field of endeavor, the purpose disclosed by Dueckinghaus et al would have been recognized in the pertinent art of Scheidt. It would have been obvious at the time the invention was made to one having ordinary skill in the art to include a load-holding valve in the first supply line of Scheidt between the control valve and the first chamber; wherein the load-holding valve includes a check valve in parallel with a stop valve; and wherein the stop valve includes pilot lines connected to the first and second chambers, to open the stop valve, and a spring biasing the valve closed, as taught by Dueckinghaus et al, for the purpose of preventing movement of the cylinder when the valves are not activated.

Conclusion

Claims 3, 4 and 6-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

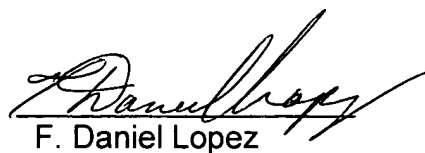
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3745

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571- 272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', is written over a horizontal line.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
February 9, 2006